Claim Amendments

Please amend the claims to be as follows.

1. (currently amended) A computer system configured as a node system of a high-availability cluster of interconnected computer systems, the node system computer system comprising:

    a memory system including an operating system which provides a clustering service for managing the cluster of interconnected computer systems as a single system;

    a first register configured to store multi-state status data of the node;

    a second register configured to store multi-state status data from another node of the high-availability cluster of interconnected computer systems;

    an input port configured to receive signals representing the multi-state status data of the other node; and

    an output port configured to send signals representing the multi-state status data of the node,

    wherein the multi-state status data of the node includes at least one degraded state three states.

2. (canceled)

3. (currently amended) The node system computer system of claim 2, wherein the multi-state status data of the other node further includes a no signal state.

4. (currently amended) The node system computer system of claim 1, wherein the multi-state status data of the node includes multiple levels of degradation at least three states includes a good level, a bad level, and a degraded level.

5. (currently amended) The node system computer system of claim 3 claim 1, wherein the multi-state status data of the other node at least three states includes a good level, a bad level, and multiple levels of degradation.

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6. (currently amended) The ~~node system~~ computer system of claim 2, wherein the input and output ports each couple to a point-to-point communication path for communicating the status data between nodes of the cluster.

7. (currently amended) The ~~node system~~ computer system of claim 1, further comprising a rule file ~~and an operating system~~, wherein the operating system applies rules from the rule file to determine the multi-state status of the node.

8. (currently amended) The ~~node system~~ computer system of claim 7, wherein the rules includes a rule such that receipt of a critical chassis code results in a bad state and another rule such that receipt of a chassis code below critical results in a degraded state.

9. (currently amended) A method of status reporting for a computer system configured as a node of a cluster of interconnected computer systems that is used as a single computing unit, the method comprising applying a set of rules to determine current multi-state status of the node, wherein states of the multi-state status includes a good state, a bad state, and at least one degraded state.

10. (original) The method of claim 9, further comprising:
    writing the multi-state status of the node to a first register.

11. (original) The method of claim 10, further comprising:
    driving the multi-state status from the first register to a next node via a point-to-point communications path.

12. (original) The method of claim 11, further comprising:
    receiving multi-state status from another node; and
    writing the multi-state status from the other node to a second register.

13. (original) The method of claim 12, further comprising:
    reading the statuses from the first and second registers; and
    taking action to maintain high availability of the cluster based on the statuses read.

14. (original) The method of claim 11, wherein the status writable into the second register includes a no signal state.

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15. (original) The method of claim 9, wherein the multi-state status of the node includes multiple levels of degradation.

16. (original) The method of claim 12, wherein the multi-state status from the other node includes multiple levels of degradation.

17. (original) The method of claim 9, wherein the set of rules includes a rule such that receipt of a chassis code of a critical level results in the bad state and another rule such that receipt of a chassis code of a level below critical results in a degraded state.

18. (currently amended) An apparatus for reporting status from a node of a high-availability computing cluster that is used as a single computing unit, the apparatus comprising:

    a processor for executing instructions;

    memory for holding data;

    system interconnect to provide intercommunication between components of the apparatus;

    a software module that is configured to apply a set of rules to determine current multi-state status of the node; and

    signaling hardware configured to output the multi-state status of the node, wherein states of the multi-state status includes a good state, a bad state, and at least one degraded state.

19. (original) The apparatus of claim 18, wherein the signaling hardware is further configured to receive as input the multi-state status from another node of the cluster.

20. (original) The apparatus of claim 19, wherein the multi-state status includes multiple levels of degradation.

21. (new) The method of claim 9,

    wherein the good state requires that both an application and an operating system report an up status and that no severe or critical chassis codes are received from the computer system,

wherein the bad state requires that either an application or an operating system report a down status, or a critical chassis code is received from the computer system, and

wherein a degraded state requires that either the computer system loses greater than a predetermined percentage of performance, or a severe chassis code is received from the computer system.